

VA Office of Environmental Education Annual Report 2007

DEQ programs help educators across the Commonwealth work together to provide high quality environmental education to support school and community-based environmental literacy. Two major priorities are implementing the education commitments of the Chesapeake Bay 2000 Agreement and Virginia's academic standards. The Virginia Department of Education reported to Governor Warner at the Chesapeake Executive Council meeting in January 2006 that nearly 76% of all Virginia schools were provided some level of watershed education based on the new academic standards in Science. A number of school divisions have begun providing meaningful watershed experiences on Virginia's Chesapeake Bay, tributaries and local streams but less than 25% of students are able to get outdoors.

C2K Meaningful Watershed Educational Experiences: MWEEs

Through a NOAA Chesapeake Bay BWET grant for \$100,000, ten school divisions are working with DEQ and the Virginia Department of Education to develop system-wide plans to integrate meaningful watershed educational experiences (MWEEs) into their curricula. Twenty-five classroom and community educators participated in a two-day training to develop the plans which include professional development and student field investigations. The grant will continue for another one year of funding and reach 10 more divisions.

Virginia Classroom and Partner Grants

Last year, with funding from the Virginia Environmental Endowment, Smithfield Foods and DCR's Chesapeake Bay grant, teachers are helping students having meaningful environmental experiences. Two more rounds of applications have been awarded, distributing \$81,850 to 116 schools. Additional funding from NOAA of \$40,000 expanded support to community, non-formal groups to build capacity in their localities for meaningful youth watershed programs. Two rounds of Partner Grants have been awarded totaling 23 grants for \$32,600.

Virginia Naturally

In 2007, 138 new partners signed up bringing the total to over 800. Monthly electronic newsletters are sent to over 1,500 educators across Virginia. 50 partners attended partner meeting at NAAEE Conference, Doubletree Hotel, Virginia Beach, VA to receive state updates. Thirteen regional groups/teams/alliances are underway in various areas of the state to bring together educators and resources to build local capacity for EE in Virginia. Training was provided to 586 community educators at 12 professional development workshops. In addition, coordination, public information,



and resources were provided to 3,809 people at 28 outreach events. 34 VaNaturally partner organizations received local, state and national awards. Stewardship VA reported 5,621 volunteers received certificates for 167 projects registered during the Spring Campaign and 3,718 volunteers received certificates for 111 registered stewardship projects during the Fall Campaign.

6th Grade Science Standards Institute Air and Water Resources

The third year of the Sixth Grade Science Standards Institutes was offered in collaboration with DGIF, DOF, DOE, Virginia Science Education Leadership Association and Virginia Association of Science Teachers and reached **52** teachers. Staff added several new links to the Sixth Grade Science SOL on-line resources handbook. Funding of \$45,000 for this program comes from NOAA Chesapeake Bay BWET.

Project WET

In 2006, a total of 517 Virginia teachers, non-formal educators and college students participated in 25 workshops for Project WET (Water Education for Teachers) and its associated curriculum. Ten (10) new workshop facilitators were trained to bring the total number of active volunteers to approximately 30.



Healthy Water, Healthy People and Wonders of Wetlands

Four workshops introducing Project WET's new water quality curriculum and test manual were conducted for 69 educators. The materials have been well-received and the web site, www.healthywater.org, is a terrific resource linking classroom activities to field activities and water quality parameters. Demand for these resources is growing as the new SOLs are being implemented. Virginia versions of two of the lessons (using DEQ's water quality data base) were developed and distributed at the workshops.

Ground Water Festival/Water Monitoring Day/Oyster Festivals and other youth events

With assistance from DEQ's Regional Offices and other agencies, **1,200** students participated in field days featuring different air, water and waste activities. Student journals and teacher preparation helped make the experience meaningful. This program is funded primarily through a \$3,000 grant from Nestle's Waters.



Love-A-Tree

Each year International Paper's Franklin plant provides \$15,000 to support curriculum materials. This year's The kit's Teacher's Guide contains lessons that focus on 3 main concepts-- why land conservation is important, what threats exist to the protection of open space (or the protection of our land base) and how land is managed to address the needs of a variety of stakeholders. As additional reference materials, we have included a land conservation poster from the Virginia Department of Conservation and Recreation, a list of related websites, a Virginia State Parks

brochure and a specially created clue cards and physiographic province map to use in conjunction with the lesson on public lands.

Clean Air Champions

A statewide campaign completed the second year in an effort to educate motorists, especially new drivers, about the benefits of improving air quality by reducing fuel consumption and ozone generation through tire pressure and engine maintenance. In cooperation with American Lung Association and ten related business and industry partners, the campaign was again used to launch the ozone season in May at the NASCAR race track in Richmond. Approximately 15,000 race fans passed by and visited the booth. Radio ads featuring Virginia



NASCAR driver Ward Burton aired at the race track and on stations in non-attainment and early action compact areas of the state. Clean Air Champions logo and gas cap stickers and magnets reminded drivers to check tire air pressure. Clean air pledge cards were used to reach over 3,000 young drivers during the ozone season from May to September. The Clean Air Champions curriculum, developed for high school aged drivers, was adopted by the Virginia Department of Education for use in the driver education program, promising to reach about 80,000 students and 600 teachers per year across the state. Spokesman, Ward Burton, also helped to teach young drivers about fuel efficiency, tire air pressure, and air pollution reduction at the Environment Virginia conference held at VMI. This Clean Air Champions program is made possible through an EPA air grant of \$100,000.

Community Involvement

Educating and encouraging Virginians to participate more effectively in environmental actions is the goal of DEQ's community involvement program.

DEQ Community Involvement
LISTENING. LEARNING. COLLABORATING.
Protecting Virginia's environment together.

DEQ is helping to involve the public early and often in significant environmental activities. DEQ regional offices have convened over 100 participatory events involving hundreds of individuals, businesses, governing bodies and organizations across the state. Regional open meetings and events provided opportunities for stakeholders to become more informed and engaged in the public environmental decision making process. DEQ staff focused on improving communication, community meetings, and stakeholder participation in the TMDL and Water Supply Planning programs.